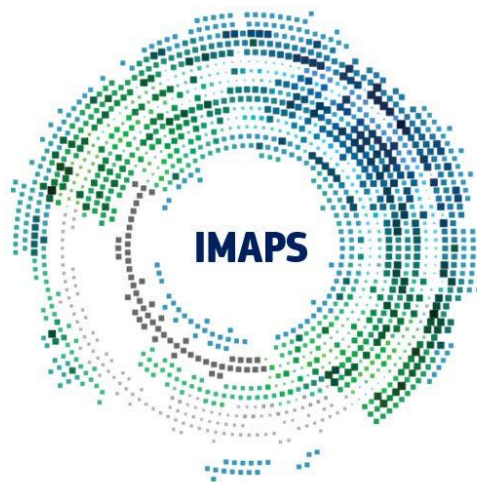


# SIMAPS v1.1.0

## Semantic Interoperability Maturity Assessment of a Public Service

### Release notes



Interoperability Maturity Assessment of Your Digital Public Service

**LIMAPS** Legal Interoperability

**OIMAPS** Organisational Interoperability

**SIMAPS** Semantic Interoperability

**TIMAPS** Technical Interoperability

## Disclaimer

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## Table of Abbreviations

Table 1: Acronyms

Acronym	Description
ABB	Architectural Building Block
CAMSS	Common Assessment Method for Standards and Specifications
CarTool	Cartography Tool
DIGIT	Directorate-General for Informatics
EC	European Commission
EIF	European Interoperability Framework
EIRA© (EIRA)	European Interoperability Reference Architecture
ELAP	EIRA Library of Architecture Principles (ELAP)
ELIS	EIRA Library of Interoperability Specifications
EU	European Union
HL SAT	High Level Solution Architecture Template
IQAT	Interoperability Quick Assessment Toolkit
ISA	Interoperability Services for Public Administrations
IMAPS	Interoperability Maturity Assessment of a Public Service
MS	Member State
PA	Public Administration
SIMAPS	Semantic Interoperability Maturity Assessment of a Public Service

# 1 INTRODUCTION

## 1.1 Purpose of this document

This document contains the description of the release version 1.1.0 of the Semantic Interoperability Maturity Assessment of a Public Service (SIMAPS).

## 1.2 Release date

Version 1.1.0 of the SIMAPS Survey has been released on the 23 September 2021 on Joinup.

## 1.3 Description

The SIMAPS Survey is a highly user-friendly online questionnaire. Designed as a self-assessment tool, the SIMAPS survey is designed for public service owners to evaluate key semantic behavioral interoperability aspects of their digital public service. On completion of the survey, the public service owners receive tailored, confidential feedback and recommendations on how to further improve their digital public service.

Details on the individual components of this release are provided in the below Chapter 2 "[Release components](#)".

## 2 SIMAPS v1.1.0 RELEASE COMPONENTS

The SIMAPS v1.1.0 release consists of the following release components.

### 2.1 [SIMAPS v1.1.0 EU Survey portal](#)

The SIMAPS survey is available at the EU Survey portal.

**Table 1: Updates at the EU Survey Portal**

Modification	Details
Version 1.1.0	
<b>Updated conceptual model of SIMAPS</b>	<p>Updates have been applied to the SIMAPS conceptual model. These updates include:</p> <ul style="list-style-type: none"> <li>Added the 'Service Identification' section (A) annotating the scope of the digital public service.</li> </ul> <p>The updated conceptual model is illustrated in the 'Introduction' section of the online SIMAPS survey.</p>
<b>SIMAPS URL at the EU Survey portal</b>	<p>The version 1.0.0 <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0</a> has been replaced by the <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0</a></p>
<b>Added a question for future contacting purposes</b>	<p>New Item "Would you like to be contacted for evaluation purposes?" has been added in the 'Introduction' section of the SIMAPS questionnaire.</p>
<b>IMAPS to SIMAPS user journey</b>	<p>The project team created a simple illustration of a "user journey" to give more context and explanation to the end-user on how the SIMAPS survey can be used and to its connection to the IMAPS survey. This visual is shown before the assessment, as part of the introduction to the survey at the EU Survey portal. It describes the structure and logic behind the SIMAPS survey, starting from the IMAPS questionnaire, explaining the SIMAPS model and structure.</p>
<b>Updated SIMAPS items</b>	<p>Some SIMAPS items from the previous version (1.0.0) were highly complex and according to the expert reviews, their terminology and language had to be simplified.</p> <p>As such, some items have been removed from SIMAPS and they have been added either to TIMAPS (item D1), or they have been deleted at all, as their scope of assessment was covered by other 1.0.0 items. The following items have been <u>deleted</u> from SIMAPS version 1.1.0:</p> <ul style="list-style-type: none"> <li>Item D1: Is the data, information and knowledge delivered by your public service compliant with e-accessibility specifications?</li> </ul>

	<ul style="list-style-type: none"> <li>• Item D4: Please indicate to how many different MS your public service delivers semantically aligned data, information and knowledge.</li> <li>• Item D7: Are semantic formats (Linked Data, RDF, ... ) being used as a data format for data delivered by your public service?</li> <li>• Item D8: Please specify how your public service handles the reference data delivered to other public services.</li> <li>• Item D9: To what extent is semantic interoperability considered when delivering data, information, and knowledge to other public services?</li> <li>• Item D10: What kind of activities do you perform to make the data, information, knowledge delivered discoverable by other public services or by end users?</li> <li>• Item D11: What kind of activities do you perform to make the data, information, knowledge delivered clearly understood its end users?</li> <li>• Item D13: Please indicate if and how many applications have been developed based on data delivered from your public service</li> <li>• Item D14: Please indicate the extent of your public service data reuse in newly developed applications.</li> <li>• Item C4: Are Linked Open Data sets being consumed by the public service?</li> <li>• Item C6: From how many MS can your public service consume data, information and knowledge? (semantically aligned)</li> <li>• Item C7: Is the public service able to consume data, information and knowledge available in more than one languages?</li> <li>• Item C9: Can the public service consume data compliant with e-accessibility specifications?</li> <li>• Item C11: Please indicate how your public service leverages semantically aligned data.</li> <li>• Item C14: What proportion of the consumed data is being discovered?</li> <li>• Item C15: What proportion of the data that your public service consumes is semantically aligned with data coming from other MS?</li> </ul> <p>Similarly, the following items have been added to SIMAPS version 1.1.0:</p> <ul style="list-style-type: none"> <li>• Item D1: To what extent does the digital public service deliver structured data, information and knowledge to its end users?</li> <li>• Item D3: To what extent does the digital public service provide rules to map the data, information and knowledge delivered?</li> <li>• Item D6: To what extent does the digital public service provide machine-readable documentation about the data, information and knowledge delivered?</li> <li>• Item D7: To what extent does the digital public service provide metadata documentation about the data, information and knowledge delivered?</li> </ul>
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	<ul style="list-style-type: none"> <li>Item D8: To what extent does the digital public service deliver data, information and knowledge that is input for a Master data repository?</li> <li>Item C1: To what extent does the digital public service consume structured data, information and knowledge from other services or end users?</li> <li>Item C4: To what extent does the digital public service consume machine-readable documentation about the data, information and knowledge consumed?</li> <li>Item C5: To what extent does the digital public service consume data, information and knowledge from a Master data repository?</li> </ul> <p>The project team has updated the language and the terminology of <b>all SIMAPS items</b> by including the terminology specificities (structure, EIRA ABBs, etc.) in the "More info" section of the online survey to facilitate end-user understanding. This way we maintain the internal structure and the alignment with other actions, facilitating the end user (i.e. who replies the questionnaire) understanding. In this context, examples have been added in the "More info" section of the online survey facilitating the end user understanding.</p>
<b>Applicability</b>	Based on the feedback from the expert reviews, the option 'Not applicable' should be included in the options of all SIMAPS items. As such, the project team added the 'Not applicable' option to all SIMAPS items as the first option. The "N/A" options will take the highest score (100/100) in order not to penalize the digital public service under assessment.
<b>Conceptual corrections</b>	<p>Unit of analysis: the digital public service. Whatever item assessed manual vs. electronic has been removed;</p> <p>The electronic, as term, has been replaced by digital;</p> <p>Applicability across geographies and sectors, has been removed.</p> <p>In the context of SIMAPS, the CAMSS terminology, ELIS requirements and ELAP principles have been used as basis and guidance to design the items and options of the questionnaire, as well as the respective interoperability aspects, linked to each item. These interoperability aspects will serve as the basis to design the High Level Solution Architecture Template (HL SAT) of SIMAPS, a specification that extends EIRA and provides high level requirements on how to design a semantically interoperable digital public service</p>
<b>Items' level of granularity</b>	Items' options have been reworked to cover a 5-level extent of replies that reflect each one of the 5 interoperability maturity levels of IMAPS (ad-hoc, opportunistic, essential, sustainable, and seamless).
<b>Scoring model</b>	The existing scoring model of SIMAPS version 1.0.0 is maintained, meaning that the sections Data, information and knowledge delivered/consumed, Service Delivery/Consumption Enablers and Service



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	<p>Delivery/Consumption Manifestations have weights 40%, 40% and 20% respectively across the whole questionnaire.</p> <p>However, the scoring per item has been adapted based on the 5 interoperability maturity levels of IMAPS (ad-hoc, opportunistic, essential, sustainable, and seamless), reflecting also the level of granularity mentioned above.</p> <p>The weight (percentage) of items has changed due to items being added and/or removed.</p> <p>The no-scoring questions have been removed and they will be added to IMAPS.</p>
<b>Previous contract change requests</b>	All Change Requests (CRs) based on JIRA tickets collected during the previous contract, have been included in the SIMAPS version 1.1.0.
Version 1.0.0	

## 2.2 [SIMAPS v1.1.0 User Guide](#)

A PDF document describing the user guide of SIMAPS including the SIMAPS model, the SIMAPS survey and the recommendations of each SIMAPS question.

**Table 2: Updates at SIMAPS User Guide**

Modification	Details
Version 1.1.0	
<b>Updated SIMAPS user guide</b>	The User Guide is a consolidated document that includes the previous release components “User guide”, “Questionnaire” and “Recommendations”.
<b>Updated conceptual model of SIMAPS</b>	<p>Updates have been applied to the SIMAPS conceptual model. These updates include:</p> <ul style="list-style-type: none"> <li>Added the ‘Service Identification’ section (A) annotating the scope of the digital public service</li> </ul> <p>The updated conceptual model is illustrated in the ‘Introduction’ section of the online SIMAPS survey.</p>
<b>IMAPS to SIMAPS user journey</b>	The project team created a simple illustration of a “user journey” to give more context and explanation to the end-user on how the SIMAPS survey can be used and to its connection to the IMAPS survey. This visual is shown before the assessment, as part of the introduction to the survey at the EU Survey portal. It describes the structure and logic behind the SIMAPS survey, starting from the IMAPS questionnaire, explaining the SIMAPS model and structure.
<b>SIMAPS URL at the EU Survey portal</b>	The version 1.0.0 <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0</a> has been replaced by the <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0</a>
<b>Updated SIMAPS items</b>	<p>Some SIMAPS items from version 1.0.0 were highly complex and according to the expert reviews, their terminology and language needed to be simplified.</p> <p>As such, some items have been removed from SIMAPS and they have been added either to TIMAPS (item D1), or they have been deleted at all, as their scope of assessment was covered by other 1.0.0 items. The following items have been deleted from SIMAPS version 1.1.0:</p> <ul style="list-style-type: none"> <li>Item D1: Is the data, information and knowledge delivered by your public service compliant with e-accessibility specifications?</li> <li>Item D4: Please indicate to how many different MS your public service delivers semantically aligned data, information and knowledge.</li> <li>Item D7: Are semantic formats (Linked Data, RDF, ...) being used as a data format for data delivered by your public service?</li> <li>Item D8: Please specify how your public service handles the reference data delivered to other public services.</li> </ul>

- Item D9: To what extent is semantic interoperability considered when delivering data, information, and knowledge to other public services?
- Item D10: What kind of activities do you perform to make the data, information, knowledge delivered discoverable by other public services or by end users?
- Item D11: What kind of activities do you perform to make the data, information, knowledge delivered clearly understood its end users?
- Item D13: Please indicate if and how many applications have been developed based on data delivered from your public service
- Item D14: Please indicate the extent of your public service data reuse in newly developed applications.
- Item C4: Are Linked Open Data sets being consumed by the public service?
- Item C6: From how many MS can your public service consume data, information and knowledge? (semantically aligned)
- Item C7: Is the public service able to consume data, information and knowledge available in more than one languages?
- Item C9: Can the public service consume data compliant with e-accessibility specifications?
- Item C11: Please indicate how your public service leverages semantically aligned data.
- Item C14: What proportion of the consumed data is being discovered?
- Item C15: What proportion of the data that your public service consumes is semantically aligned with data coming from other MS?

Similarly, the following items have been added to SIMAPS version 1.1.0:

- Item D1: To what extent does the digital public service deliver structured data, information and knowledge to its end users?
- Item D3: To what extent does the digital public service provide rules to map the data, information and knowledge delivered?
- Item D6: To what extent does the digital public service provide machine-readable documentation about the data, information and knowledge delivered?
- Item D7: To what extent does the digital public service provide metadata documentation about the data, information and knowledge delivered?
- Item D8: To what extent does the digital public service deliver data, information and knowledge that is input for a Master data repository?
- Item C1: To what extent does the digital public service consume structured data, information and knowledge from other services or end users?
- Item C4: To what extent does the digital public service consume machine-readable documentation about the data, information and knowledge consumed?
- Item C5: To what extent does the digital public service consume data, information and knowledge from a Master data repository?

The project team has updated the language and the terminology of **all SIMAPS items** by including the terminology specificities (structure, EIRA ABBs, etc.) in the “More info” section of the online survey to facilitate end-user understanding. This way we

## SIMAPS v1.1.0 Release notes

	maintain the internal structure and the alignment with other actions, facilitating the end user (i.e. who replies the questionnaire) understanding. In this context, examples have been added in the “More info” section of the online survey facilitating the end user understanding.
<b>Applicability</b>	Based on the feedback from the expert reviews, the option ‘Not applicable’ should be included in the options of all SIMAPS items. As such, the project team added the ‘Not applicable’ option to all SIMAPS items as the first option. The “N/A” options will take the highest score (100/100) in order not to penalize the digital public service under assessment.
<b>Conceptual corrections</b>	Unit of analysis: the digital public service. Whatever item assessed manual vs. electronic has been removed; The electronic, as term, has been replaced by digital; Applicability across geographies and sectors, has been removed. CAMSS
<b>Items’ level of granularity</b>	Items’ options have been reworked to cover a 5-level extent of replies that reflect each one of the 5 interoperability maturity levels of IMAPS (ad-hoc, opportunistic, essential, sustainable, and seamless).
<b>Scoring model</b>	The existing scoring model of SIMAPS version 1.0.0 is maintained, meaning that the sections Data, information and knowledge delivered/consumed, Service Delivery/Consumption Enablers and Service Delivery/Consumption Manifestations have weights 40%, 40% and 20% respectively across the whole questionnaire. However, the scoring per item has been adapted based on the 5 interoperability maturity levels of IMAPS (ad-hoc, opportunistic, essential, sustainable, and seamless), reflecting also the level of granularity mentioned above. The weight (percentage) of items has changed due to items being added and/or removed. The no-scoring questions have been removed and they will be added to IMAPS.
<b>Previous contract change requests</b>	All Change Requests (CRs) based on JIRA tickets collected during the previous contract, have been included in the SIMAPS version 1.1.0.
Version 1.0.0	

## 2.3 [SIMAPS v1.1.0 Publication on Joinup](#)

The public web page (<https://joinup.ec.europa.eu/collection/imaps-interopability-maturity-assessment-public-service/solution/simaps/about>) describing SIMAPS version 1.1.0.

**Table 3: Changes in Joinup**

Modification	Details
Version 1.1.0	
<b>Updated conceptual model of SIMAPS</b>	<p>Updates have been applied to the SIMAPS conceptual model. These updates include:</p> <ul style="list-style-type: none"> <li>Added the 'Service Identification' section (A) annotating the scope of the digital public service</li> </ul> <p>The updated conceptual model is illustrated in the 'Introduction' section of the online SIMAPS survey.</p>
<b>SIMAPS URL at the EU Survey portal</b>	<p>The version 1.0.0 <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0</a> has been replaced by the <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0</a></p>
<b>SIMAPS Release components</b>	<p>The version 1.1.0 includes the following release components:</p> <ul style="list-style-type: none"> <li>SIMAPS v1.1.0 EU Survey portal</li> <li>SIMAPS v1.1.0 User Guide;</li> <li>SIMAPS v1.1.0 Publication on Joinup;</li> <li>SIMAPS v1.1.0 Value proposition;</li> <li>SIMAPS v1.1.0 Release package;</li> <li>ISA product license.</li> </ul>
Version 1.0.0	

## 2.4 SIMAPS v1.1.0 Value Proposition

A PDF document, which provides the value proposition of SIMAPS v1.1.0.

**Table 4: Changes in SIMAPS value proposition**

Modification	Details
Version 1.1.0	
<b>Updated conceptual model of SIMAPS</b>	<p>Updates have been applied to the SIMAPS conceptual model. These updates include:</p> <ul style="list-style-type: none"> <li>Added the 'Service Identification' section (A) annotating the scope of the digital public service</li> </ul> <p>The updated conceptual model is illustrated in the 'Introduction' section of the online SIMAPS survey.</p>
<b>SIMAPS URL at the EU Survey portal</b>	<p>The version 1.0.0 <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_0_0</a> has been replaced by the <a href="https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0">https://ec.europa.eu/eusurvey/runner/SIMAPS_v_1_1_0</a></p>
<b>Updated layout</b>	<p>The layout of the SIMAPS value proposition has been updated following the same look and feel of IMAPS "one pager". In addition, the following sections have been added for an optimal user experience:</p> <ul style="list-style-type: none"> <li><i>What is SIMAPS</i>: describes the logic of the SIMAPS survey</li> <li><i>What is in for you</i>: describes the benefits for the users by using SIMAPS</li> <li><i>For whom is SIMAPS relevant</i>: describes the target users (profiles) of the users that should take the SIMAPS assessment</li> <li><i>SIMAPS conceptual model &amp; structure</i>: describes the SIMAPS conceptual model and its structure</li> <li><i>Digital Public Service Components</i>: describes the three different service areas i.e. Service Identification, Service Delivery and Service Consumption that the SIMAPS assessment captures</li> </ul>
Version 1.0.0	

## 2.5 [ISA Product License v1.3](#)

The license under which the SIMAPS v1.1.0 is released.

**Table 5: Changes in SIMAPS release**

Modification	Details
Version 1.1.0	
Version 1.0.0	

## 2.6 [SIMAPS v1.1.0 Release](#)

An archive containing each of the above mentioned files.

**Table 6: Changes in SIMAPS release**

Modification	Details
Version 1.1.0	
<b>Release package of all release components – SIMAPS v1.1.0</b>	The package of SIMAPS version 1.1.0 does not include the SIMAPS Recommendations as a separate file from the User Guide. The User Guide is a consolidated document that includes the previous release components “User guide”, “Questionnaire” and “Recommendations”.
Version 1.0.0	